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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,152	04/27/2001	Markus Stolze	SZ999024US1/954-010121-US	1785
7590 08/12/2004		EXAMINER		
Perman & Green, LLP		MCCLELLAN, JAMES S		
425 Post Road		ART UNIT		
Fairfield, CT 06430		PAPER NUMBER		

3627

DATE MAILED: 08/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/844,152

Applicant(s)

STOLZE ET AL.

Examiner

James S McClellan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 and 29-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5-10, 15-26 and 29-31 is/are rejected.
- 7) ☐ Claim(s) 3 and 11-14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Amendment*

1. Applicant's submittal of an amendment was entered on May 13, 2004 wherein:
  - claims 1-26 and 29-31 are pending;
  - claims 27 and 28 have been canceled;
  - claims 1, 9, and 22-24 have been amended; and
  - claims 29-31 have been added.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 4-6, 10, 17-20, 22-26, 30, and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,070,149 (hereinafter "Tavor").

Regarding **claim 1**, Tavor discloses a method of selecting, in an electronic product catalog system, a question to be presented to a user of the system (see column 5, lines 56-60) to assist identification of a suitable product from a set of potentially suitable products according to the user's needs, the question being selected from a group of questions stored in said system (see column 11, lines 42-44, "All questions, which are stored in memory"), which method comprises: processing product data stored in said system, defining features of products in said set and

product scores associated with respective products in said set (see column 12, lines 22-26), and rule data stored in said system (see column 5, lines 56-65, “rules base”), defining rules relating answers associated with said questions (see paragraph bridging columns 5-6) to product features constraints (see column 8, lines 36-53, for example “carat” size is a product feature), to calculate question scores (either True or False; see paragraph bridging columns 5-6) such that the question scores for each question is dependent on one of (a) the product scores of any products excluded from said set if said rule relating to an answer associated with that question is effective and (b) the product scores of any products retained in said set if said rule relating to an answer associated with that question is effective (see column 6, lines 10-15),; and selecting the question to be presented to the user in dependence on said question scores (see column 6, lines 5-15); **[claim 2]** the question score is dependent on one of the product is either excluded or retained (see column 6, lines 5-15); **[claim 4]** the question score for each question is dependent on only (b) (see column 6, lines 5-15); **[claim 5]** said product scores are predetermined in said system for respective products (see column 4, lines 1-9); **[claim 6]** product scores are associated with user needs and selecting from the group of product scores for a product corresponding the to the user needs (see column 9, lines 50-60); **[claim 10]** calculating the product scores associated with respective products in dependence on values assigned to product features by said rules (see column 6, lines 5-15); **[claim 17]** said set of potentially suitable products is determined by previous interaction of the user with said system (see column 8, lines 36-53); **[claim 18]** defining said set of potentially suitable products from a feature-based filtering component (see column 21, lines 33-40) **[claim 19]** supplying the selected question for display to the user (see Figure 3 and column 8, lines 36-53); **[claim 20]** supplying at least some answers associated with the selected

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question for display to the user (see Figure 3 and column 8, lines 36-53; also see column 11, lines 48-56); **[claim 22]** determining if any of the rules are effective based on the user's answer and applying feature-based filter (see column 6, lines 5-15) **[claim 23]** prior to selecting a question to be presented to a user: generating question data, comprising said group of questions, and storing the question data in said system; generating catalog data, including said product data for products in said set, defining features of catalog products and product scores associated with respective products, and storing the catalog data in said system; and generating said rule data and storing the rule data in said system (see columns 5-6).

Regarding **claims 24-26**, Tavor discloses an apparatus (see Figure 1) for selecting a question to be presented to user as set forth above in the analysis of process claim (claim 1).

Regarding **claims 30 and 31**, Tavor discloses a computer program product (see Figure 1) and article of manufacture (see Figure 1) that perform the method of claim 1.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7, 8, 15, 16, 21, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tavor in view of U.S. Patent No. 6,633,852 (hereinafter "Heckerman").

Regarding **claims 7, 8, 15, 16, 21, and 31**, Tavor fails to expressly disclose determining a probability of a product being suitable for the user and ordering the answers by rank.

Heckerman discloses determining a probability of a product being suitable for the user (see column 12, lines 35-64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tavor with product probability determinations as taught by Heckerman, because determining the probability that a product is desirable decreases the time required to fine tune the search for the user.

#### ***Allowable Subject Matter***

6. Claims 3, 9, and 11-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

7. Applicant's arguments filed May 13, 2004 and supplemental arguments filed May 21, 2004 have been fully considered but they are not persuasive.

On page 13, final paragraph of the May 13<sup>th</sup> Remarks, Applicant argues that Tavor fails to disclose or suggest "defining rules relating answers associated with the questions to product feature constraints." The Examiner respectfully disagrees. Tavor relates rules to product feature constraints (see 8, lines 36-53). Additionally, it appears that Applicant is arguing that Tavor fails to fuzzy logic (remarks at top of page 14), but claim 1 fails to set forth such detail. Since fuzzy logic ("grey-level reasoning") is not claimed, Applicant's argument is moot.

On page 14, first full paragraph (5/13/04), Applicant argues that the Examiner's citation (col. 6, lines 10-15) does not disclose question selection based on scores. The Examiner

respectfully disagrees. The Examiner's citation discloses the True/False rules logic disclosed by Tavor. Tavor's use of T/F gives either a score of True or a score of False. If the score is True, certain questions are presented as opposed to a score of False (additionally see column 9, lines 38-49).

On pages 14-15 (5/13/04), Applicant argues features of Tavor's LookAhead module. Applicant's comments are noted, but Tavor was cited for all of its disclosure, not merely the LookAhead module. Additionally, on page 15, first full paragraph, (5/13/04), Applicant argues that Tavor does not have any module that reasons in any way about what question is the next best to ask. The Examiner respectfully disagrees. Tavor states that users respond to questions the SEU finds necessary to ask. (see column 9, lines 38-49).

On page 15, final paragraph (5/13/04), Applicant argues that Tavor does not disclose or suggest calculating "question scores". The Examiner respectfully disagrees. As set forth earlier in the Examiner's response to Arguments, Tavor disclose True/False scoring of the answers.

On page 16, second full paragraph, Applicant argues that Tavor fails to disclose product scores dependent on one of (a) product scores of excluded products or (b) product scores of retained products. Since product scores are dependent on the products and since the options (a) excluded products and (b) retained products define a whole set of potential products, it is inherent that Tavor's T/F scores are at least dependent on either (a) excluded products or (b) retained products.

On page 13, first paragraph of the May 21<sup>st</sup> supplemental Remarks, Applicant argues that there is no motivation of combining Tavor and Heckerman. The Examiner respectfully disagrees. As set forth previously and again in this Final Rejection, it would have been obvious

to one of ordinary skill in the art at the time the invention was made to modify Tavor with product probability determinations as taught by Heckerman, because determining the probability that a product is desirable decreases the time required to fine tune the search for the user.

On page 13, second paragraph, Applicant argues that the technical combination of Tavor and Heckerman is not possible, without major engineering. The Examiner respectfully disagrees. One of ordinary skill in the art would recognize that probability algorithms would be advantageous to any product recommendation system, including Tavor. Additionally, the engineering required to design a combined system as taught by Tavor and Heckerman would be well within the knowledge of one of ordinary skill in the art.

On page 13, final paragraph, Applicant argues that there are numerous differences between Heckerman and the current invention. The Examiner agrees. The Examiner admits that there are differences between Heckerman and the current invention but it was never the Examiner's intention to assert that Heckerman and the current invention are the same. As set forth above, Heckerman is a secondary teaching reference in a 35 U.S.C. § 103 combination rejection. However, Heckerman teaches all claimed limitations that are not explicitly stated in Tavor and proper motivation of combining the references is given. Therefore the combination of Tavor and Heckerman is maintained.

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).



A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jim McClellan whose telephone number is (703) 305-0212. The examiner can normally be reached on Monday-Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Olszewski, can be reached at (703) 308-5183.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Any response to this action should be mailed to:

Commissioner of Patent and Trademarks  
Washington D.C. 20231

or faxed to:

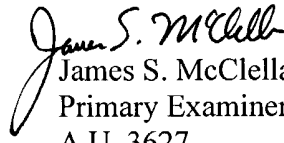
(703) 872-9306 (Official communications) or  
(703) 746-3516 (Informal/Draft communications).

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Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive,  
Arlington, VA, 7<sup>th</sup> floor receptionist.

  
James S. McClellan  
Primary Examiner  
A.U. 3627

jsm  
August 9, 2004